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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,072	08/18/2003	Franck R. Diard	019680-006000US	4195

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EXAMINER

MONESTIME, MACKLY

ART UNIT PAPER NUMBER

2676

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,072

Applicant(s)

DIARD ET AL.

Examiner

Mackly Monestime

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14, and 19-29 is/are allowed.
- 6) ☒ Claim(s) 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-29 are presented for examination.

Specification

2. Applicant is requested to update the related applications information in the specification. Update with serial number or patent number (page 1, line 6; page 19, line 4).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. As per claim 15, line 16 recites the limitation of "**the bridge processor**"; there is insufficient antecedent basis for this limitation in the claim.

6. As per claim 17, lines 5-6 recite the limitation of "**the bridge processor**"; there is insufficient antecedent basis for this limitation in the claim.

7. As per claims 16-18, they are also rejected for incorporating the deficiency of their base claim.

Allowable Subject Matter

8. Claims 1-14, and 19-29 are allowable over the prior art of record.

9. Claims 15-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The prior art of record failed to teach or suggest individually or in combination a graphics processing subsystem for a computer system having a first memory and a second memory having plurality of storage locations, wherein the graphics system further comprising the uniquely distinct features: "wherein first storage locations in the first memory and second storage in the second memory are uniquely identifiable by respective first and second private addresses internal to the graphics processing subsystem, and wherein the first graphics processor is configured to access the second storage location in the second memory by referencing the second private address" (as per claim 1); further failed to disclose: "assigning a respective unique private address to each of the storage locations in each of the first and second memories, wherein the private addresses are internal to the graphics processing subsystem; and referencing a target address that matches a private address of one of the storage locations in the second memory; identifying a target storage location in the second memory based on the matched private address; and accessing the target storage location in the second memory" (as per claim 19); and also further failed to disclose: "assigning a respective unique private address to each of the storage locations in each of the first and second memories, wherein the private addresses are internal to the graphics processing subsystem; and referencing a destination address that matches a private address of one of the storage locations in the second memory; identifying a destination storage

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location in the second memory based on the matched private address; and initiating a data transfer from the source location to the destination location (as per claims 28 and 29). These distinct features of the present claims invention have not found to be anticipated, suggested or made obvious by the prior art of record, either singularly or in combination.

11. The prior art of record failed to teach or suggest individually or in combination a graphics processing subsystem for a computer system having a first memory and a second memory having plurality of storage locations, wherein the graphics system further comprising the uniquely distinct features: "a bridge unit coupled to each of the first and second memory interfaces and configured to assign a unique private address to each of the storage locations in each of the first and second memories; and wherein the bridge unit is configured to process the first memory access request by accessing the second memory interface in the event that the address matches a private address of one of the storage locations in the second memory (as per claim 15). These distinct features of the present claims invention have not found to be anticipated, suggested or made obvious by the prior art of record, either singularly or in combination.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Katsura et al (US Patent No. 6,781,590) taught a graphic processing system having bus connection control functions.

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Grigor et al (US Patent No. 6,023,281) taught a method and apparatus for memory allocation.

Dragony et al (US Patent No. 6,724,390) taught an allocating memory.

Laksono et al (US Patent No. 6,747,654) taught a multiple device frame synchronization method and apparatus.

Morein et al (US Patent No. 6,473,086) taught a method and apparatus for graphics processing using parallel graphics processors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to:

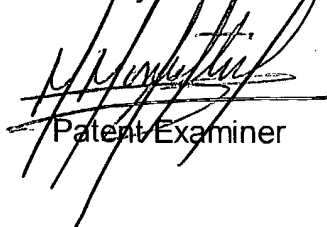
(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime

A handwritten signature in black ink, appearing to read 'Mackly Monestime', written over a horizontal line.

Patent Examiner

November 17, 2004

A handwritten signature in black ink, appearing to read 'Matthew C. Bella', written in a cursive style.

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600